

**REMARKS**

In response to the Final Office Action mailed February 17, 2006 in the present application, Applicants respectfully request reconsideration. Claims 1-15 were pending in this application. Claims 1, 5, 7 and 12 are amended. No claims are added and no claims are canceled. Accordingly, claims 1-15 remain pending in this application, of which claims 1, 7 and 12 are independent.

In this Response, Applicants' silence with regard to the Examiner's rejections of dependent claims constitutes a recognition by the Applicants that the rejections are moot based on the Remarks relative to the independent claim from which the dependent claims depend. Applicants reserve the option to further prosecute the same or similar claims in the instant or a subsequent application.

**Claim Rejections**

In the Final Office Action mailed February 17, 2006, the Examiner rejected claims 1, 4-7, 10-12, 14 and 15 under 35 U.S.C. § 102(e) as being anticipated by *Straforini et al.* (U.S. 6,092,059).

The Examiner rejected claims 2, 3, 8, 9 and 13 under 35 U.S.C. § 103(a) as being unpatentable over *Straforini et al.* in view of *Rangachar* (U.S. 5,495,521).

Applicants respectfully traverse the rejections.

Independent claim 1, as amended, recites a method of analyzing first data elements representative of a particular task, comprising inputting the first data element into a first data classifier, operating the first data classifier to generate classification outputs from the first data elements, wherein the classification outputs are indicative of classes of data for the particular task, inputting the first data elements and the classification outputs into a rule inducer and operating the rule inducer to generate rules explaining relationships between the first data elements and the classification outputs.

Independent claim 7 recites an analysis system, comprising a first data classifier configured to generate classification outputs from first data elements input into the first data

classifier and a rule inducer configured to generate rules indicative of a relationship between the first data elements and the generated classification outputs.

Independent claim 12 recites a processor program for classifying data, the processor program disposed on a processor-readable medium and comprising instructions to cause a processor to generate classification outputs from first data elements by inputting the first data elements into a first data classifier configured to generate the classification outputs from the first data elements, and generate rules indicative of a relationship between the first data elements and the classification outputs by inputting the first data elements and the classification outputs into a rule inducer configured to output the rules based on said first data elements and said classification outputs.

*Straforini et al.* describe a hierarchical classification system based on a hierarchy of classifiers for real time inspection and classification. A first rule based sub-classifier 54 attempts to classify objects at a fairly broad brush level. Those objects that are not classified are then provided to a training based sub-classifier 56, which may be implemented by a neural network. Of those objects that the training based sub-classifier 56 is able to classify, a second rule based sub-classifier 58 attempts to provide a refinement to those classifications provided by the training based sub-classifier 56. Of those objects unable to be classified by the training based sub-classifier 56, a third rule based sub-classifier attempts to classify the objects.

While *Straforini et al.* use multiple rule-based classifiers, nowhere in *Straforini et al.*, and in particular in the sections referred to by the Examiner, is there a description of a rule inducer or generator that operates on the data elements and classification outputs to generate rules that explain the relationship between the data elements and classification outputs obtained from the data elements. The first rule-based classifier in *Straforini et al.* receives data elements or objects and provides classification outputs. Each subsequent classifier in *Straforini et al.* also receives objects and provides either a refined classification or attempts to classify object not previously classified. Nowhere does *Straforini et al.* input both data elements and classification outputs into a rule inducer so as to obtain rules that explain the relationship between the data elements input into a classifier and the classification outputs provided by the classifier.

Accordingly, *Straforini et al.* does not anticipate independent claims 1, 7 and 12. Applicants respectfully submit that independent claims 1, 7 and 12 are patentable over *Straforini et al.* and are in condition for allowance. Claims 2-6, 8-11 and 13-15 depend from respective claims 1, 7 and 12 and are allowable at least by dependency.

Additionally, *Straforini et al.* is silent with regard to generating a second data classifier based on the generated rules, as recited in claims 6, 11 and 14. As provided in the above remarks, *Straforini et al.* does not generate rules and thus cannot generate a data classifier based on the generated rules. The Examiner has failed to provide any mention of the features of claims 6, 11 and 14 in the rejection of claims 1, 4-7, 10-12, 14 and 15 under 35 U.S.C. § 102(e). The Examiner also fails to provide any reasoning in support of the rejection and any indication as to where in *Straforini et al.* the alleged generation of a second data classifier can be found.

With respect to claims 2, 3, 8, 9 and 13, *Rangachar* also does not relate to rule generation. Since neither *Straforini et al.* nor *Rangachar* teach or suggest rule generation, the Examiner has failed to present a prima facie case of obviousness. Accordingly, each of the dependent claims 2-6, 8-11 and 13-15 are patentable over *Straforini et al.* in view of *Rangachar*, at least by dependency, and are in condition for allowance.

### **CONCLUSION**

In view of the foregoing remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.

Respectfully submitted,

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